

WHAT IS CLAIMED IS:

1. An exposure apparatus which transfers a mask pattern onto a substrate via a projection optical system, comprising:
 - 5 a structure which is supported by a vibration isolating mechanism; and a partition wall which is inserted in at least part of an optical path of exposure light used in the exposure apparatus,
 - 10 wherein said structure and said partition wall are coupled by an elastic seal member to form a closed space, and an interior of the partition wall is partitioned from a remaining space.
 - 15 2. The apparatus according to claim 1, wherein said partition wall is arranged on a structure which is different from said structure and supported by a vibration isolating mechanism.
 - 20 3. The apparatus according to claim 1, wherein at least one of a wafer stage and a reticle stage is arranged in the closed space within said partition wall.
 - 25 4. The apparatus according to claim 1, further comprising gas supply means for supplying gas into an internal space of said partition wall.
 5. The apparatus according to claim 4, wherein the gas supplied by said gas supply means includes clean dry air or inert gas.

6. The apparatus according to claim 4, wherein an elastic seal member is used at a connection portion between said partition wall and said gas supply means.
7. The apparatus according to claim 1, wherein said 5 partition wall comprises an openable/closable door or lid.
8. The apparatus according to claim 1, wherein said partition wall is coupled by an elastic seal member to another partition wall which forms a closed space 10 different from the closed space.
9. The apparatus according to claim 8, wherein said another partition wall which forms the different closed space is arranged on a structure which is supported by an independently arranged vibration isolating 15 mechanism.
10. The apparatus according to claim 8, wherein said another partition wall which forms the different closed space includes a partition wall which covers at least one of a wafer transfer system and a reticle transfer 20 system.
11. The apparatus according to claim 1, further comprising:
 - a stage device which moves while holding a mask or a substrate;
 - 25 a reaction force receiving structure which is arranged outside said partition wall independently of said structure supported by the vibration isolating

mechanism in order to receive a reaction force upon driving said stage device; and

a force actuator which generates a force between said stage device and said reaction force receiving
5 structure,

wherein said force actuator is arranged via a through hole formed in said partition wall, and
an elastic seal member is used between the through hole and said force actuator to keep the
10 internal space of said partition wall airtight.

12. The apparatus according to claim 1, wherein the elastic seal member is formed from a flexible material which allows folding a thin plate-like member into an accordion zigzag shape or modifying the thin plate-like
15 member.

13. The apparatus according to claim 12, wherein the elastic seal member is formed from a metal thin film, a resin, or a composite material of the metal thin film and the resin.

20 14. A semiconductor device manufacturing method of manufacturing a semiconductor device by using an exposure apparatus which transfers a mask pattern onto a substrate via a projection optical system, comprising:

25 a coating step of coating the substrate with a photosensitive agent;
an exposure step of exposing the substrate by the

exposure apparatus; and

a step of developing the exposed substrate,

wherein the exposure apparatus includes

a structure which is supported by a vibration

5 isolating mechanism, and

a partition wall which is inserted in at least

part of an optical path of exposure light used in the

exposure apparatus,

the structure and the partition wall are coupled

10 by an elastic seal member to form a closed space, and

an interior of the partition wall is partitioned

from a remaining space.